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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,867	11/13/2003	Stephane M. Arsenault	16358.14.1	6300

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EXAMINER	
SUN, XIUQIN	

ART UNIT	PAPER NUMBER
2863	

MAIL DATE	DELIVERY MODE
10/31/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/705,867	ARSENAULT ET AL.	
	Examiner	Art Unit	
	Xiuqin Sun	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 August 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10 and 29-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10 and 29-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 08/27/07
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-10, and 29-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Rodgers et al. (U.S. Pat. No. 6,493,650 B1).

Regarding claim 1, Rodgers et al. disclose: a surveying system for generating a computer model of a physical site, the system comprising (Abstract): a survey measurement device for determining a location of a selected feature relative to the survey measurement device (col. 6, lines 5-25); and a computer-aided drafting (CAD) module for modeling the physical site, the CAD module, including a CAD application program installed on a computer for receiving from the survey measurement device data related to the location of the selected feature, and for creating a corresponding object in the computer model, and a bi-directional communication interface (i.e., the I/O interface card 12) between the CAD application program and the survey measurement device for communicating commands from the CAD application program to the survey measurement device (col. 6, lines 46-52; col. 8, lines 40-44) and for communicating the data related to the location of the selected feature from the survey measurement device

to the CAD application program (col. 7, lines 15-21; cols. 5-6, lines 58-3; col. 6, lines 46-52; and col. 9, lines 5-13).

Regarding claim 2, Rodgers et al. disclose: wherein the computer includes an interactive display for enabling the operator to interact with the model at the survey site and enabling the operator to control the survey measurement device by use of a graphical user interface associated with the CAD module (cols. 9-10, lines 60-19).

Regarding claim 3, Rodgers et al. disclose: wherein the bi-directional communication interface includes a wireless link (col. 3, lines 30-33; col. 5, lines 62-67).

Regarding claim 4, Rodgers et al. disclose: wherein the bi-directional communication interface includes a cable link (Fig 1; col. 5, lines 62-67).

Regarding claim 5, Rodgers et al. disclose: wherein the survey measurement device comprises a total station (cols. 5-6, lines 58-3).

Regarding claim 6, Rodgers et al. disclose: wherein the survey measurement device comprises a hand held laser measurement device (col. 9, lines 29-42).

Regarding claim 7, Rodgers et al. disclose: wherein the survey measurement device comprises a global positioning system based device (cols. 5-6, lines 58-44).

Regarding claim 8, Rodgers et al. disclose: wherein the survey measurement device comprises a high definition scanner (col. 11, lines 8-25; col. 9, lines 9-11).

Regarding claim 9, Rodgers et al. disclose: wherein the location of the selected feature and the corresponding object are represented in two dimensions (cols. 9-10, lines 60-19).

Regarding claim 10, Rodgers et al. disclose: wherein the location of the selected feature and the corresponding object are represented in three dimensions (cols. 9-10, lines 60-19).

Regarding claim 29, Rodgers et al. disclose: a method of marking features at a site corresponding to objects in a computer 15 model, the method comprising (Abstract): selecting, through interaction with a graphical user interface associated with a computer-aided drafting (CAD) module, an object in a computer model of the site pre-loaded into the CAD module, the object corresponding to a feature at the site (col. 9, lines 5-13; cols. 9-10, lines 60-19); transmitting real world coordinates of the feature from the CAD module to a survey measurement device (col. 3, lines 51-54; col. 6, lines 5-25 and lines 46-52; col. 10, lines 20-25 and 32-37); commanding the survey measurement device to indicate a location of the feature (col. 10, lines 44-51); and marking the location (col. 10, lines 44-51).

Regarding claim 30, Rodgers et al. disclose: said CAD module includes a graphical user interface that enables a user to select an object identifier from a drop-down menu in the graphical user interface (col. 8, lines 57-60; cols. 9-10, 60-7).

Regarding claim 31, Rodgers et al. disclose: means for calculating error in measured feature locations (col. 5, lines 41-56).

Regarding claim 32, Rodgers et al. disclose: the CAD module further includes means for distributing the error amongst a plurality of measured feature locations (col. 5, lines 41-56; col. 8, lines 7-18).

Regarding claim 33, Rodgers et al. disclose: the CAD module includes means for creating layered models of the site and means for assigning attributes to the objects (cols. 9-10, lines 60-7).

Regarding claim 34, Rodgers et al. disclose: the CAD module determines attributes of the object in accordance with predetermined object choices (cols. 9-10, lines 60-7).

Regarding claim 35, Rodgers et al. disclose: the survey measurement device is robotically controlled (col. 6, lines 5-25) and the CAD module sends a positioning command to the survey measurement device to cause the survey measurement device to measure the feature (col. 6, lines 46-52).

Regarding claim 36, Rodgers et al. disclose: loading the CAD module with a set of plans or CAD files for the site (col. 9, lines 9-13; cols. 9-10, lines 60-7).

Regarding claim 37, Rodgers et al. disclose: setting up reference points at the site corresponding to reference objects in the computer model (cols. 9-10, lines 60-7).

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Response to Arguments

4. Applicant's arguments filed 08/27/07 have been fully considered but they are not persuasive.

Applicants argued that "[t]hus, in Rodgers, et al. there is no bi-directional communication interface between a CAD application program and the survey measurement device for communicating commands from the CAD application program to the survey measurement device and for communicating the data related to the location of the selected feature from the survey measurement device to the CAD application program as called for in claim 1." The argument is not persuasive. The Examiner's position is that, giving the claim the broadest reasonable interpretation, Rodgers, et al. do disclose or suggest or teach the limitation of a bi-directional communication interface between a CAD application program and the survey measurement device for communicating commands from the CAD application program to the survey measurement device and for communicating the data related to the location of the selected feature from the survey measurement device to the CAD application program. Detailed response is given in section 2 as set forth above.

Applicants' argument with respect to claim 29 is not persuasive either. It is the

Examiner's position that, giving the claim the broadest reasonable interpretation, Rodgers, et al. do disclose or suggest or teach "transmitting real world coordinates of a feature from the CAD module to a survey measurement device". In particular, this step of the process is implemented by sending the user who carries the CAD module physically to designated locations in the scene to be surveyed, therefore transmitting real world coordinates of the location from the CAD module to the survey measurement device. See section 2 as set forth above for more detailed response.

Applicants' arguments regarding newly added claims 30-37 are moot in view of the new grounds of rejection.

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuqin Sun whose telephone number is (571)272-2280. The examiner can normally be reached on 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571)272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

XS
October 16, 2007

MICHAEL NGHIEM
PRIMARY EXAMINER

10/29/07

/Michael P. Nghiem/
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